

CONTENTS OF VOLUME 18

Wald Lectures, Kolmogorov Memorial Articles, Articles and Short Communications

AHLWEDE, R. AND BURNASHEV, M. V. On minimax estimation in the presence of side information about remote data	141-171
AMEMIYA, YASUO AND ANDERSON, T. W. Asymptotic chi-square tests for a large class of factor analysis models	1453-1463
ANDERSON, T. W. AND AMEMIYA, YASUO. Asymptotic chi-square tests for a large class of factor analysis models	1453-1463
ARRATIA, R., GORDON, L. AND WATERMAN, M. S. The Erdős-Rényi law in distribution, for coin tossing and sequence matching	539-570
ASMUSSEN, SØREN. Exponential families and regression in the Monte Carlo study of queues and random walks	1851-1867
BARRY, DANIEL AND HARTIGAN, J. A. An omnibus test for departures from constant mean	1340-1357
BERGER, JAMES. Discussion of "An ancillarity paradox which appears in multiple linear regression" by Brown	493-496
BERGER, JAMES O. AND DELAMPADY, MOHAN. Lower bounds on Bayes factors for multinomial distributions, with application to chi-squared testing	1295-1316
BERGER, JAMES O. AND ROBERT, CHRISTIAN. Subjective hierarchical Bayes estimation of a multivariate normal mean: On the frequentist interface	617-651
BHATTACHARYA, P. K. AND GANGOPADHYAY, ASHIS K. Kernel and nearest-neighbor estimation of a conditional quantile	1400-1415
BICKEL, P. J. AND RITOV, Y. Achieving information bounds in non and semiparametric models	925-938
BICKEL, PETER J. AND GHOSH, J. K. A decomposition for the likelihood ratio statistic and the Bartlett correction—A Bayesian argument	1070-1090
BLOCK, H. W., CHHETRY, D., FANG, Z. AND SAMPSON, A. R. Partial orders on permutations and dependence orderings on bivariate empirical distributions	1840-1850
BOENTE, GRACIELA AND FRAIMAN, RICARDO. Asymptotic distribution of robust estimators for nonparametric models from mixing processes	891-906
BÖHM, WALTER AND HACKL, PETER. Improved bounds for the average run length of control charts based on finite weighted sums	1895-1899
BROWN, LAWRENCE D. An ancillarity paradox which appears in multiple linear regression	471-492
BROWN, LAWRENCE D. Rejoinder	533-538
BROWN, LAWRENCE D. AND GAJEK, LESLAW. Information inequalities for the Bayes risk	1578-1594

- BUJA, ANDREAS. Remarks on functional canonical variates, alternating least squares methods and ACE 1032-1069
- BURNASHEV, M. V. AND AHLSEDE, R. On minimax estimation in the presence of side information about remote data 141-171
- CARROLL, R. J. AND HALL, PETER. Nonparametric estimation of optimal performance criteria in quality engineering 281-302
- CASELLA, GEORGE. Discussion of "An ancillarity paradox which appears in multiple linear regression" by Brown 497-500
- CHAN, K. S. Testing for threshold autoregression 1886-1894
- CHANG, I-SHOU AND HSIUNG, CHAO A. Time-sequential point estimation through estimating equations 1378-1388
- CHANG, MYRON N. Weak convergence of a self-consistent estimator of the survival function with doubly censored data 391-404
- CHANG, TED AND EAVES, DAVID. Reference priors for the orbit in a group model 1595-1614
- CHENG, QIANSHENG. Maximum standardized cumulant deconvolution of non-Gaussian linear processes 1774-1783
- CHENTSOV, NIKOLAI N. The unfathomable influence of Kolmogorov 987-998
- CHHETRY, D., FANG, Z., SAMPSON, A. R. AND BLOCK, H. W. Partial orders on permutations and dependence orderings on bivariate empirical distributions 1840-1850
- CHIU, SHEAN-TSONG. On the asymptotic distributions of bandwidth estimates 1696-1711
- CIFARELLI, DONATO MICHELE AND REGAZZINI, EUGENIO. Distribution functions of means of a Dirichlet process 429-442
- COOK, STEPHANIE L., LLOPIS, JIMENA, PENG, N. P. AND DUDLEY, R. M. A. N. Kolmogorov and statistics: A citation bibliography 1017-1031
- COPAS, J. B. Discussion of "An ancillarity paradox which appears in multiple linear regression" by Brown 500-502
- COX, DENNIS D. AND O'SULLIVAN, FINBARR. Asymptotic analysis of penalized likelihood and related estimators 1676-1695
- CROWLEY, JOHN AND JONES, MICHAEL P. Asymptotic properties of a general class of nonparametric tests for survival analysis .. 1203-1220
- DABROWSKI, ANDRÉ ROBERT, McDONALD, DAVID AND RÖSLER, UWE. Renewal theory properties of ion channels 1091-1115
- DAVIES, LAURIE. The asymptotics of S -estimators in the linear regression model 1651-1675
- DÉGERINE, SERGE. Canonical partial autocorrelation function of a multivariate time series 961-971
- DELAMPADY, MOHAN AND BERGER, JAMES O. Lower bounds on Bayes factors for multinomial distributions, with application to chi-squared testing 1295-1316
- DEMBO, AMIR, KAWABATA, TSUTOMU AND KARLIN, SAMUEL. Statistical composition of high-scoring segments from molecular sequences 571-581

DETTE, H. A generalization of D - and D_1 -optimal designs in polynomial regression	1784-1804
DEVROYE, LUC AND GYÖRFI, LÁSZLÓ. No empirical probability measure can converge in the total variation sense for all distributions	1496-1499
DIACONIS, P. AND FREEDMAN, D. On the uniform consistency of Bayes estimates for multinomial probabilities	1317-1327
DOKSUM, KJELL A. AND LO, ALBERT Y. Consistent and robust Bayes procedures for location based on partial information ..	443-453
DONOHU, DAVID L., LIU, RICHARD C. AND MACGIBBON, BRENDA. Minimax risk over hyperrectangles, and implications	1416-1437
DUDLEY, R. M., COOK, STEPHANIE L., LLOPIS, JIMENA AND PENG, N. P. A. N. Kolmogorov and statistics: A citation bibliography	1017-1031
EAVES, DAVID AND CHANG, TED. Reference priors for the orbit in a group model	1595-1614
EFRON, B. Discussion of "An ancillarity paradox which appears in multiple linear regression" by Brown	502-503
EFRON, BRADLEY AND JOHNSTONE, IAIN M. Fisher's information in terms of the hazard rate	38-62
EMOTO, SHERRIE E. AND MATTHEWS, PETER C. A Weibull model for dependent censoring	1556-1577
FANG, Z., SAMPSON, A. R., BLOCK, H. W. AND CHHETRY, D. Partial orders on permutations and dependence orderings on bivariate empirical distributions	1840-1850
FRAIMAN, RICARDO AND BOENTE, GRACIELA. Asymptotic distribution of robust estimators for nonparametric models from mixing processes	891-906
FRASER, D. A. S. AND REID, N. Discussion of "An ancillarity paradox which appears in multiple linear regression" by Brown	503-507
FREEDMAN, D. AND DIACONIS, P. On the uniform consistency of Bayes estimates for multinomial probabilities	1317-1327
FRYDENBERG, MORTEN. Marginalization and collapsibility in graphical interaction models	790-805
GAJEK, LESLAW AND BROWN, LAWRENCE D. Information inequalities for the Bayes risk	1578-1594
GANGOPADHYAY, ASHIS K. AND BHATTACHARYA, P. K. Kernel and nearest-neighbor estimation of a conditional quantile	1400-1415
GHOSH, J. K. AND BICKEL, PETER J. A decomposition for the likelihood ratio statistic and the Bartlett correction—A Bayesian argument	1070-1090
GILL, RICHARD D. AND JOHANSEN, SØREN. A survey of product-integration with a view toward application in survival analysis ..	1501-1555
GILL, RICHARD D. AND KEIDING, NIELS. Random truncation models and Markov processes	582-602

GLESER, LEON JAY. Discussion of "An ancillarity paradox which appears in multiple linear regression" by Brown	507-513
GOLUBEV, GRIGORI K. AND NUSSBAUM, MICHAEL. A risk bound in Sobolev class regression	758-778
GORDON, L., WATERMAN, M. S. AND ARRATIA, R. The Erdős-Rényi law in distribution, for coin tossing and sequence matching	539-570
GUO, LEI AND HUANG, DAWEI. Estimation of nonstationary ARMAX models based on the Hannan-Rissanen method	1729-1756
GYÖRFI, LÁSZLÓ AND DEVROYE, LUC. No empirical probability measure can converge in the total variation sense for all distributions	1496-1499
HACKL, PETER AND BÖHM, WALTER. Improved bounds for the average run length of control charts based on finite weighted sums	1895-1899
HALL, PETER. Pseudo-likelihood theory for empirical likelihood	121-140
HALL, PETER AND CARROLL, R. J. Nonparametric estimation of optimal performance criteria in quality engineering	281-302
HALL, PETER AND JONES, M. C. Adaptive M -estimation in nonparametric regression	1712-1728
HÄRDLE, W. AND MARRON, J. S. Semiparametric comparison of regression curves	63-89
HARDWICK, JANIS AND WOODROOFE, MICHAEL. Sequential allocation for an estimation problem with ethical costs	1358-1377
HARTIGAN, J. A. AND BARRY, DANIEL. An omnibus test for departures from constant mean	1340-1357
HART, JEFFREY D. AND VIEU, PHILIPPE. Data-driven bandwidth choice for density estimation based on dependent data	873-890
HASMINSKII, RAFAEL AND IBRAGIMOV, IL'DAR. On density estimation in the view of Kolmogorov's ideas in approximation theory	999-1010
HAYTER, A. J. AND LIU, W. The power function of the Studentised range test	465-468
HEDAYAT, A. AND ZHAO, W. Optimal two-period repeated measurements designs	1805-1816
HENDRIKS, HARRIE. Nonparametric estimation of a probability density on a Riemannian manifold using Fourier expansions	832-849
HESSE, C. H. A Bahadur-type representation for empirical quantiles of a large class of stationary, possibly infinite-variance, linear processes	1188-1202
HILL, B. M. Discussion of "An ancillarity paradox which appears in multiple linear regression" by Brown	513-523
HJORT, NILS LID. Goodness of fit tests in models for life history data based on cumulative hazard rates	1221-1258
HJORT, NILS LID. Nonparametric Bayes estimators based on beta processes in models for life history data	1259-1294

HOFFMAN, WHERLY P. AND LEURGANS, SUE E. Large sample properties of two tests for independent joint action of two drugs .	1634-1650
HSIUNG, CHAO A. AND CHANG, I-SHOU. Time-sequential point estimation through estimating equations	1378-1388
HUANG, DAWEI AND GUO, LEI. Estimation of nonstationary ARMAX models based on the Hannan-Rissanen method . . .	1729-1756
HWANG, JIUNN T. AND LIU, HUNG-KUNG. Sequential confidence regions in inverse regression problems	1389-1399
IBRAGIMOV, ILDIRAR AND HASMINSKII, RAFAEL. On density estimation in the view of Kolmogorov's ideas in approximation theory	999-1010
INGLOT, TADEUSZ AND LEDWINA, TERESA. On probabilities of excessive deviations for Kolmogorov-Smirnov, Cramér-von Mises and chi-square statistics	1491-1495
JOHANSEN, SØREN AND GILL, RICHARD D. A survey of product-integration with a view toward application in survival analysis . .	1501-1555
JOHANSEN, SØREN AND JOHNSTONE, IAIN M. Hotelling's theorem on the volume of tubes: Some illustrations in simultaneous inference and data analysis	652-684
JOHNSTONE, IAIN M. Discussion of "An ancillarity paradox which appears in multiple linear regression" by Brown	523-525
JOHNSTONE, IAIN M. AND EFRON, BRADLEY. Fisher's information in terms of the hazard rate	38-62
JOHNSTONE, IAIN M. AND JOHANSEN, SØREN. Hotelling's theorem on the volume of tubes: Some illustrations in simultaneous inference and data analysis	652-684
JOHNSTONE, IAIN M. AND SILVERMAN, BERNARD W. Speed of estimation in positron emission tomography and related inverse problems	251-280
JONES, M. C. AND HALL, PETER. Adaptive M -estimation in nonparametric regression	1712-1728
JONES, MICHAEL P. AND CROWLEY, JOHN. Asymptotic properties of a general class of nonparametric tests for survival analysis	1203-1220
KADANE, JOSEPH B. AND WASSERMAN, LARRY A. Bayes' theorem for Choquet capacities	1328-1339
KARLIN, SAMUEL, DEMBO, AMIR AND KAWABATA, TSUTOMU. Statistical composition of high-scoring segments from molecular sequences	571-581
KARR, ALAN F. AND ZUCKER, DAVID M. Nonparametric survival analysis with time-dependent covariate effects: A penalized partial likelihood approach	329-353
KAWABATA, TSUTOMU, KARLIN, SAMUEL AND DEMBO, AMIR. Statistical composition of high-scoring segments from molecular sequences	571-581
KEIDING, NIELS AND GILL, RICHARD D. Random truncation models and Markov processes	582-602

KIM, JEANKYUNG AND POLLARD, DAVID. Cube root asymptotics . .	191-219
KOLASSA, JOHN E. AND McCULLAGH, PETER. Edgeworth series for lattice distributions	981-985
KOUL, HIRA L. AND PFLUG, GEORG CH. Weakly adaptive estima- tors in explosive autoregression	939-960
KOYAK, ROBERT. Consistency for ACE-type methods	742-757
KREISS, JENS-PETER. Testing linear hypotheses in autoregres- sions	1470-1482
LAREDO, CATHERINE F. A sufficient condition for asymptotic sufficiency of incomplete observations of a diffusion process .	1158-1171
LEDWINA, TERESA AND INGLOT, TADEUSZ. On probabilities of ex- cessive deviations for Kolmogorov-Smirnov, Cramér- von Mises and chi-square statistics	1491-1495
LETAC, GÉRARD AND MORA, MARIANNE. Natural real exponential families with cubic variance functions	1-37
LEURGANS, SUE E. AND HOFFMAN, WHERLY P. Large sample prop- erties of two tests for independent joint action of two drugs .	1634-1650
LIU, HUNG-KUNG AND HWANG, JIUNN T. Sequential confidence regions in inverse regression problems	1389-1399
LIU, REGINA Y. On a notion of data depth based on random simplices	405-414
LIU, RICHARD C., MACGIBBON, BRENDA AND DONOHO, DAVID L. Minimax risk over hyperrectangles, and implications	1416-1437
LIU, W. AND HAYTER, A. J. The power function of the Studen- tised range test	465-468
LLOPIS, JIMENA, PENG, N. P., DUDLEY, R. M. AND COOK, STEPHANIE L. A. N. Kolmogorov and statistics: A citation bibliography .	1017-1031
LO, ALBERT Y. AND DOKSUM, KJELL A. Consistent and robust Bayes procedures for location based on partial information . .	443-453
LOHR, SHARON L. Accurate multivariate estimation using triple sampling	1615-1633
LU, KUN-LIANG. Discussion of "An ancillarity paradox which appears in multiple linear regression" by Brown	525-528
MACGIBBON, BRENDA, DONOHO, DAVID L. AND LIU, RICHARD C. Minimax risk over hyperrectangles, and implications	1416-1437
MARDEN, JOHN I. AND PERLMAN, MICHAEL D. On the inadmissi- bility of step-down procedures for the Hotelling T^2 problem .	172-190
MARGOLIN, BARRY H. AND SIMPSON, DOUGLAS G. Nonparametric testing for dose-response curves subject to downturns: Asymptotic power considerations	373-390
MARRON, J. S. AND HÄRDLE, W. Semiparametric comparison of regression curves	63-89
MATTHEWS, PETER C. AND EMOTO, SHERRIE E. A Weibull model for dependent censoring	1556-1577
McCULLAGH, PETER AND KOLASSA, JOHN E. Edgeworth series for lattice distributions	981-985

McDONALD, DAVID, RÖSLER, UWE AND DABROWSKI, ANDRÉ ROBERT. Renewal theory properties of ion channels	1091-1115
McKEAGUE, IAN W. AND UTIKAL, KLAUS J. Inference for a non-linear counting process regression model	1172-1187
MORA, MARIANNE AND LETAC, GÉRARD. Natural real exponential families with cubic variance functions	1-37
MORRIS, C. N. Discussion of "An ancillarity paradox which appears in multiple linear regression" by Brown	528-530
NAIMAN, DANIEL Q. Volumes of tubular neighborhoods of spherical polyhedra and statistical inference	685-716
NUSSBAUM, MICHAEL AND GOLUBEV, GRIGORI K. A risk bound in Sobolev class regression	758-778
NYCHKA, DOUGLAS. The average posterior variance of a smoothing spline and a consistent estimate of the average squared error	415-428
O'SULLIVAN, FINBARR AND COX, DENNIS D. Asymptotic analysis of penalized likelihood and related estimators	1676-1695
OWEN, ART. Empirical likelihood ratio confidence regions	90-120
PENG, N. P., DUDLEY, R. M., COOK, STEPHANIE L. AND LLOPIS, JIMENA. A. N. Kolmogorov and statistics: A citation bibliography	1017-1031
PERLMAN, MICHAEL D. AND MARDEN, JOHN I. On the inadmissibility of step-down procedures for the Hotelling T^2 problem	172-190
PFANZAGL, J. Large deviation probabilities for certain nonparametric maximum likelihood estimators	1868-1877
PFLUG, GEORG CH. AND KOUL, HIRA L. Weakly adaptive estimators in explosive autoregression	939-960
PHELAN, MICHAEL J. Bayes estimation from a Markov renewal process	603-616
POLLARD, DAVID AND KIM, JEANKYUNG. Cube root asymptotics ..	191-219
REGAZZINI, EUGENIO AND CIFARELLI, DONATO MICHELE. Distribution functions of means of a Dirichlet process	429-442
REID, N. AND FRASER, D. A. S. Discussion of "An ancillarity paradox which appears in multiple linear regression" by Brown	503-507
RITOV, Y. Asymptotic efficient estimation of the change point with unknown distributions	1829-1839
RITOV, Y. Decision theoretic optimality of the CUSUM procedure	1464-1469
RITOV, Y. Estimation in a linear regression model with censored data	303-328
RITOV, Y. AND BICKEL, P. J. Achieving information bounds in non and semiparametric models	925-938
ROBERT, CHRISTIAN AND BERGER, JAMES O. Subjective hierarchical Bayes estimation of a multivariate normal mean: On the frequentist interface	617-651

RÖSLER, UWE, DABROWSKI, ANDRÉ ROBERT AND McDONALD, DAVID. Renewal theory properties of ion channels	1091-1115
RUKHIN, ANDREW L. Kolomogorov's contributions to mathematical statistics	1011-1016
SAMPSON, A. R., BLOCK, H. W., CHHETRY, D. AND FANG, Z. Partial orders on permutations and dependence orderings on bivariate empirical distributions	1840-1850
SEOH, MUNSUP. Berry-Esseen-type bounds for signed linear rank statistics with a broad range of scores	1483-1490
SHORROCK, GLENN. Improved confidence intervals for a normal variance	972-980
SILVERMAN, BERNARD W. AND JOHNSTONE, IAIN M. Speed of estimation in positron emission tomography and related inverse problems	251-280
SIMPSON, DOUGLAS G. AND MARGOLIN, BARRY H. Nonparametric testing for dose-response curves subject to downturns: Asymptotic power considerations	373-390
SKOVGAARD, IB M. On the density of minimum contrast estimators	779-789
STEIN, CHARLES. Discussion of "An ancillarity paradox which appears in multiple linear regression" by Brown	530-533
STEIN, MICHAEL. Uniform asymptotic optimality of linear predictions of a random field using an incorrect second-order structure	850-872
STEIN, MICHAEL L. A comparison of generalized cross validation and modified maximum likelihood for estimating the parameters of a stochastic process	1139-1157
STEIN, MICHAEL L. Bounds on the efficiency of linear predictions using an incorrect covariance function	1116-1138
STONE, CHARLES J. Large-sample inference for log-spline models	717-741
STREITBERG, BERND. Lancaster interactions revisited	1878-1885
TIAO, GEORGE C. AND TSAY, RUEY S. Asymptotic properties of multivariate nonstationary processes with applications to autoregressions	220-250
TSAY, RUEY S. AND TIAO, GEORGE C. Asymptotic properties of multivariate nonstationary processes with applications to autoregressions	220-250
TSIATIS, ANASTASIOS A. Estimating regression parameters using linear rank tests for censored data	354-372
UTIKAL, KLAUS J. AND McKEAGUE, IAN W. Inference for a non-linear counting process regression model	1172-1187
VAN DE GEER, SARA. Estimating a regression function	907-924
VIEU, PHILIPPE AND HART, JEFFREY D. Data-driven bandwidth choice for density estimation based on dependent data	873-890
WASSERMAN, LARRY ALAN. Prior envelopes based on belief functions	454-464

WASSERMAN, LARRY A. AND KADANE, JOSEPH B. Bayes' theorem for Choquet capacities	1328-1339
WATERMAN, M. S., ARRATIA, R. AND GORDON, L. The Erdős-Rényi law in distribution, for coin tossing and sequence matching .	539-570
WEI, C. Z. AND WINNICKI, J. Estimation of the means in the branching process with immigration	1757-1773
WINNICKI, J. AND WEI, C. Z. Estimation of the means in the branching process with immigration	1757-1773
WOODROOFE, MICHAEL AND HARDWICK, JANIS. Sequential allocation for an estimation problem with ethical costs	1358-1377
WU, C. F. J. On the asymptotic properties of the jackknife histogram	1438-1452
YING, ZHILIANG. Nonlinear stochastic approximation procedures for L_p loss functions	1817-1828
ZHANG, CUN-HUI. Fourier methods for estimating mixing densities and distributions	806-831
ZHAO, W. AND HEDAYAT, A. Optimal two-period repeated measurements designs	1805-1816
ZUCKER, DAVID M. AND KARR, ALAN F. Nonparametric survival analysis with time-dependent covariate effects: A penalized partial likelihood approach	329-353

Corrections

CROWLEY, JOHN AND TSAI, WEI-YANN. A large sample study of generalized maximum likelihood estimators from incomplete data via self-consistency	470
CUZICK, JACK. Rank regression	469
KOENKER, ROGER AND PORTNOY, STEPHEN. Adaptive L -estimation for linear models	986
PORTNOY, STEPHEN AND KOENKER, ROGER. Adaptive L -estimation for linear models	986
TSAI, WEI-YANN AND CROWLEY, JOHN. A large sample study of generalized maximum likelihood estimators from incomplete data via self-consistency	470
WELSH, A. H. On M -processes and M -estimation	1500